

## **CHAPTER 4: Introduction to Probability**

### **Learning Objectives**

After reading this chapter and doing the exercises, you should be able to:

1. Obtain an appreciation of the role probability information plays in the decision making process.
2. Understand probability as a numerical measure of the likelihood of occurrence.
3. Know the three methods commonly used for assigning probabilities and understand when they should be used.
4. Know how to use the laws that are available for computing the probabilities of events.
5. Understand how new information can be used to revise initial (prior) probability estimates using Bayes' theorem.